



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 6**  
**1445 ROSS AVENUE**  
**DALLAS, TEXAS 75202-2733**

September 4, 2019

Mr. Bobby Jones  
Corpus Christi Field Office  
Regulatory Division, CESWG-RD-R  
U.S. Army Corps of Engineers  
5151 Flynn Parkway, Suite 306  
Galveston, Texas 78411-4318

Dear Mr. Bobby Jones:

The Environmental Protection Agency (EPA) Region 6 has reviewed Public Notice (PN) SWG-2018-00789, dated August 8, 2019. The applicant, Axis Midstream Holdings, LLC, proposes to construct a series of facilities and pipelines to store, transport, and load crude oil into marine transport vessels. EPA is providing the following comments for use in reaching a decision relative to compliance with the EPA's *404(b)(1) Guidelines for the Specification of Disposal Sites for Dredged or Fill Material* (Guidelines) (40 CFR Part 230).

Upon review of the current proposal, it is unclear whether the information provided by the applicant on the proposed project will sufficiently enable the Corps to make a legally defensible permit decision in regard to compliance with the Guidelines. Under the Guidelines, no discharge of dredged or fill material may be permitted by the Corps if: (1) a practicable alternative exists that is less damaging to the aquatic environment so long as that alternative does not have other significant adverse environmental consequences or (2) the nation's waters would be significantly degraded. Under the Guidelines, a project must incorporate all appropriate and practicable measures to first avoid impacts to wetlands, streams, and other aquatic resources and then minimize unavoidable impacts; after avoidance and minimization measures have been applied, the project must include appropriate and practicable compensatory mitigation for the remaining unavoidable impacts.

It does not appear that compliance with the requirements of Section 230.10(c) of the Guidelines has not been clearly demonstrated. Section 230.10(c) requires that no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. The Guidelines explicitly require evaluation of all direct, secondary and cumulative impacts reasonably associated with the proposed discharge in determining compliance with Section 230.10(c). In determining significant degradation, the Guidelines direct consideration of effects on such functions and values as wildlife habitat, aquatic ecosystem diversity, stability and productivity, recreation, aesthetics, and economic values. As provided in

the PN, the information provided by the applicant does not appear to adequately reflect consideration of all potential direct, secondary, and cumulative impacts to these functions and values.

Specifically, it is anticipated there is potential for significant impacts to Redfish Bay, and it is unclear if possible environmental losses related the impacts upon aquatic ecosystems, nearby seagrasses, and organisms have been evaluated. These estuarine habitats are vital to supporting the food webs that maintain populations of commercially and recreationally important finfish and shellfish, migratory and grassland bird species, and other wildlife. The proposed project route would pass through Redfish Bay and the Texas Parks and Wildlife Commission designated Redfish Bay State Scientific Area (RBSSA). The RBSSA contains unique high quality and high value biological communities including seagrass beds, oyster reefs, marshes and mangroves. Seagrasses play critical roles in the coastal environment by providing nursery habitat for estuarine fisheries, serving as a major source of organic biomass for coastal food webs, contributing to the stabilization of shorelines and sediment to reduce coastal erosion and improve water clarity, as well as contributing to nutrient cycling and water quality processes. Redfish Bay represents the most extensive area of pristine seagrass beds outside the Laguna Madre. The EPA recommends a comprehensive scientific evaluation to evaluate direct, secondary and cumulative impacts especially considering the nature of the impacts and the scope and scale of public interest in the project.

As provided in the PN, it is unclear how project has avoided and minimized impacts to the greatest extent practicable. Given the proposed project site is located in an environmentally sensitive area with high quality habitats, emphasis should be placed on the importance of avoiding and minimizing impacts to aquatic resources. Limited information on alternate project locations, site selection criteria, alternate site layout, or the no action alternative is provided. An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose. Each alternative should identify the associated aquatic impacts, and it may be appropriate to consider a combination of alternatives. Techniques such as maximizing horizontal directional drilling throughout project area. and limiting impacts associated with construction access should be considered. Identifying this type of information aids in the selection of the least environmentally damaging practicable alternative (LEDPA). It would be anticipated that a thorough evaluation be prepared that demonstrates planning efforts to avoid, minimize, and compensate for wetland and special aquatic site losses associated with the construction, operation and maintenance of the proposed project. The provided information should also assist the Corps in making its factual determinations for compliance or non-compliance with the 404(b)(1) Guidelines based upon the final single and complete project being identified. Please note that providing this material after public review does not allow optimum analysis of the entire range of significant potential environmental impacts.

To mitigate for unavoidable impacts to the aquatic environment, the PN notes the applicant is proposing a conceptual permittee-responsible in-kind compensatory mitigation approach that would occur in two separate locations. The proposed mitigation would include shoreline stabilization and hydrologic improvements. If the Corps determines it is in the public's interest to issue a permit for the project, the applicant must compensate for any unavoidable impacts to

waters of the United States. For unavoidable impacts to aquatic resources, the 2008 Final Mitigation Rule states in Section 230.93(c)(1)(i) that for individual permits, the permittee must prepare a draft mitigation plan and submit it to the district engineer for review. The final mitigation plan must include the items describe in paragraphs (c)(2) through (c)(14) of the same section, *at a level of detail commensurate with the scale and scope of the impacts* [emphasis added]. At the district engineer's discretion, some of the elements may be addressed as special conditions to the permit. These required elements include: objectives, site selection, site protection, baseline information, determination of credits, mitigation workplan, maintenance plan, performance standards, monitoring requirements, long-term management plant, adaptive management plan, financial assurances and other information as required by the district engineer. While it is not required to submit this complete plan at the time of the PN, providing additional details at the earliest stage possible allows the public and commenting agencies to have a more complete understanding of the net impacts of the proposal, taking into account mitigation.

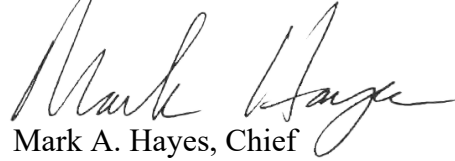
Once a comprehensive alternatives analysis and evaluation of avoidance and minimization measures have been completed, the EPA recommends the development of a final mitigation plan for agency and public review. The final plan should contain more detailed information about the proposed mitigation approach and how the proposed restoration, enhancement and preservation activities will mitigate for unavoidable impacts.

As currently provided, it is unclear if the function for the types and quantities of aquatic resources impacted by the proposed project would be replaced. Information should be provided to assess the function of the impact area and the projected function of the mitigation area. Additionally, design elements such as hydrologic modeling and sediment accretion analysis supporting the proposed hydrologic improvements and contemporary seagrass surveys, turbidity and water quality modeling to support how the proposed shoreline protection will mitigate for losses to seagrasses, tidal flats and wetlands may be warranted. Furthermore, it is unclear as to whether temporal losses have been addressed, especially for seagrass and tidal flat impacts as it is unclear how losses associated with trenching through seagrasses or tidal flats can be considered temporary. Given the inherent difficulties associated with restoration techniques for seagrasses and tidal flats, it is even more critical to avoid and minimize impacts to the greatest extent possible. Finally, given the time between impacts being realized by construction activities and the proposed mitigation sites achieving success criteria, it may also be appropriate to require additional mitigation for temporal losses that occur. Mitigation success criteria and monitoring requirements should also be sufficiently robust to ensure the mitigation approaches effectively compensate for the significant projects impacts to aquatic resources. The plan should address how the resources will be maintained in perpetuity including site protection, financial assurances and/or adaptive management.

In summary, the EPA recommends the Corps work with the applicant to enhance the information provided to assist the Corps in determining compliance with the Guidelines especially in regard avoidance and minimization measures and the evaluation of all direct, secondary, and cumulative impacts of the proposed project. Additionally, the EPA recommends the Corps work with the applicant to develop a mitigation plan to address all unavoidable impacts to seagrasses, tidal flats and wetlands. Thank you for the opportunity to review and comment on this PN, and if you have

any questions on these comments, please contact Paul Kaspar of my staff, at [kaspar.paul@epa.gov](mailto:kaspar.paul@epa.gov) or 214-665-7459.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Hayes", written in a cursive style.

Mark A. Hayes, Chief  
NPDES/Wetlands Review Section

cc: U.S. Fish and Wildlife Service, Corpus Christi, TX  
National Marine Fisheries Service, Galveston, TX  
Texas Commission on Environmental Quality, Austin, TX  
Texas Parks and Wildlife Department, Corpus Christi, TX